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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,834	05/01/2001	Mari Tateishi	TSL1469CIP	4974

137 7590 07/17/2002

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EXAMINER

CROSS, LATOYA I

ART UNIT	PAPER NUMBER
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1743

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DATE MAILED: 07/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/846,834

Applicant(s)

TATEISHI ET AL.

Examiner

LaToya I. Cross

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 9-30-1998. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1, 2 and 4-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 3,894,169 to Miller.

Miller '169 discloses an acoustical damping structure comprising a plurality of coating layers, namely the primer coating, sound absorber layer; and impedance matching coating. The coating layer are made of elastomer based material, such as silicon liquids and elastomers.

Dispersed in the base material are fillers which are finely divided particles and/or powders. See

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col. 3, lines 24-41. The particles and/or powders are present in an amount of about 10-50 percent by volume of the elastomers. The primer coating contains a silicon elastomer or polymer such as dimethyl polysiloxane or methyl phenyl polysiloxane (col. 5, lines 9-14). The sound absorbing coating is also made of silicone elastomers. Dispersed in the sound absorbing layer are metal or siliceous particles in a fine powdered condition. The particles are in the range of 20-40 microns (col. 5, lines 24-60). The third acoustic impedance layer may also be of silicone elastomers and dispersed in this layer are finely divided fillers having a particle size of 1-10 microns. Examples 1 and 2 show composite coatings which comprise liquid silicone elastomers having particles of two different particle sizes dispersed therein. At col. 9, lines 19-31, Miller teaches the additional use of thickeners in the composition, as recited in claim 12.

Miller '169 differ from the instantly claimed invention in that there is no specific disclosure of the amount of viscous liquid (silicone elastomer) is present in the composite layers. However, the reference does teach that the filler particles and powders are uniformly distributed in the elastomer. Thus, one of ordinary skill in the art would expect that the elastomer would have to present in an amount sufficient to receive the particles and/or powders and sufficient enough to form a coating layer. Thus, it is believed that the amount of elastomer disclosed by the reference would encompass the amount instantly claimed absent evidence to the contrary.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 U.S.C. 103 in view of the teachings of Miller '169.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller '169 as applied to claim 1 above, and further in view of US Patent 5,661,203 to Akamatsu et al.

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The above-mentioned claims further define the type of silicone oil and its kinematic viscosity. Applicants' claim that the silicone oil is selected from those having a kinematic viscosity of 100 mm²/s to 1,000,000 mm²/s, preferably 500 mm²/s to 500,000 mm²/s at 25°C, such as trimethylsiloxy-endblocked polydimethyl siloxanes and copolymers of trimethylsiloxy-endblocked polydimethyl siloxane-polymethylphenyl siloxane.

Akamatsu et al '203 discloses damping compositions that comprise silicone liquids and resinous particles. Akamatsu et al '203 like Miller '169 teaches the use of polysiloxane oils in the damping compositions. Akamatsu et al '203 teaches that polysiloxane oils such as trimethylsiloxy-endblocked polydimethyl siloxanes and trimethylsiloxy-endblocked polydimethyl siloxane-polymethylphenyl siloxane copolymers, especially those having a kinematic viscosity of 1×10^{-4} to 1 m²/sec prevent separation and aggregation of the particles. Siloxane oils having this viscosity are also easier to handle (col. 2, lines 37-67 and col. 3, lines 1-5).

Thus, it would have been obvious to one of ordinary skill in the art to use such polysiloxane oils as instantly claimed in damping compositions since Akamatsu et al '203 teaches that the use of such polysiloxanes help to prevent aggregation of the particles and increase ease of handling.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 U.S.C. 103 in view of the teachings of Miller '169 and Akamatsu et al '203.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is (703) 305-7360.

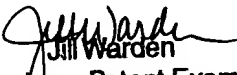
The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden, can be reached at (703) 308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

LIC

July 1, 2002


Jill Warden
Supervisory Patent Examiner
Technology Center 1700